

# Pregnancies conceived extramaritally

A study in a general practice

SHIRLEY E. NATHAN, M.B., B.S., M.R.C.G.P., D.Obst.R.C.O.G.

Borehamwood, Herts

**P**REGNANCIES are frequently conceived outside wedlock. This paper is an enquiry into such pregnancies which occurred in a group practice of 11,500 patients over a period of a year which ended in July 1967. The practice is situated near London and most of the patients live on a Greater London Council housing estate which was built after the second world war. A comparatively small number of patients live in the original village and in the new privately-owned houses nearby. The district is residential, with practically no 'bed-sitter' type accommodation. There is local industry and full employment though a proportion of local residents travel to London for work and leisure. The practice consisted of four doctors with full ancillary help, two health visitors and three district nurses being attached to it.

## Procedure

For the period of the survey all patients who had pregnancies conceived out of wedlock were referred to one partner. The pregnancy was usually confirmed both clinically and by laboratory methods. A preliminary interview was arranged with the doctor, the patient and her parent, and this usually took place within a few days of the pregnancy being confirmed. Practical arrangements for the future were made and, if necessary, the girl was referred to the Church social worker who advised the girl on having her confinement away from this district and on adoption if it was desired. A second, main interview, was held with the girl, usually at the surgery in the evening, and half an hour was allowed for this. Although a questionnaire form was used, this was as a guide to discussion rather than as a straightforward list of questions. The first group of questions referred to the girl's background—family, occupation of herself, her father and the putative father, and her religion. The second group of questions concerned her sexual education and her previous sexual experience, and this included her understanding of birth control and her relationship with the putative father. The reaction of the patient, her family and the putative father on finding herself pregnant were next discussed and finally her plans for the future. A second questionnaire was completed when the baby was born, and included the place and nature of the confinement. The third enquiry was made at six weeks and repeated at six months after the baby was born. This was a simple form, completed by the patient herself or by the health visitor. It asked whether the girl was married and if her husband was the putative father; whether she had kept her baby; whether she was working and, if so, who looked after the baby while she worked and by whom she was supported. At six months she was also asked if she felt the decisions she had made had been right.

It has been necessary throughout this paper to refer to patients by numbers, to prevent the possibility of identification. For the same reason no case histories can be given but only isolated details concerning cases.

## Extent of the survey

The total number of pregnancies recorded as occurring within the practice in the year was 159 and of these 50 were extramarital conceptions. Of the total cases, 79

women had not had a previous pregnancy of more than 28 weeks duration and 43 of these were extramarital conceptions. Thus in one year in this practice, 54 per cent of first babies were conceived out of wedlock. However, it is possible that the total 159 does not include a few women who aborted early in pregnancy without informing a doctor, and those women who left the area early in their pregnancy without having had their pregnancy confirmed at the surgery. The series includes three girls who came to the town for the duration of their pregnancies, one to stay with relatives and two with friends. It is possible that girls from this town have gone away in similar circumstances, unknown to their doctors. Many young married couples leave the town in order to get accommodation. Council housing is not available until a couple have been married for at least two years and private accommodation locally is both scarce and expensive. So those couples, who plan their future, frequently buy a home away from the area. For these reasons our figures for the proportion of extramarital conceptions in this practice may be artificially high.

#### **Parental involvement**

Those girls who were married by the time they were seen by us or who had been married previously, were not asked to bring a parent to the surgery, nor could the girls who came to the town for the duration of their pregnancies. In the remaining 33 cases only three girls failed to bring a parent to discuss their problem, and two of these aborted early in pregnancy. The third, whose parents were divorced, lived in her father's home but he showed no interest. Of the 30 mothers interviewed, only one was unco-operative and said she did not want to be involved in her daughter's problems. The others, having adjusted themselves to the initial shock, were helpful in making plans for their daughters' antenatal care and confinement. Those girls who visited the Church social worker were usually accompanied by their mothers. No girl was 'thrown out' of her home, though one family revealed a stress situation which was probably the basis of the girl's cyesis. It was interesting that frequently the mother's reaction, on finding her daughter pregnant, was one of self pity and the comment "How could you do this to me?" was sometimes made.

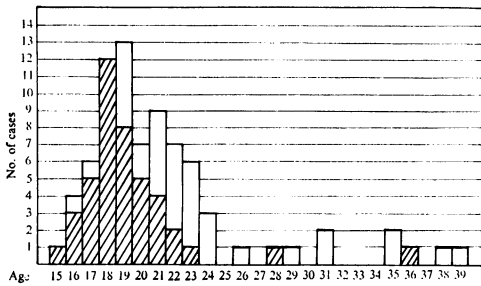
#### **Degree of collaboration**

Of the 50 girls in the series one was not asked to attend for interview for reasons of discretion as she was a married woman, living with her husband, but the putative father was not her husband. Two young women were asked repeatedly to attend but they refused to do so. They were both well known to the practice so many facts about them have been included in this paper. A fifth girl who was not interviewed spent much of her time away from home and she said that she did not wish to discuss her case. The remaining 45 patients were interviewed and proved to be remarkably co-operative; only one or two girls appeared to resent being asked questions and many were obviously delighted to have an opportunity to talk about themselves and their personal problems. Each girl was invited to take the opportunity to ask about any problem that was worrying her.

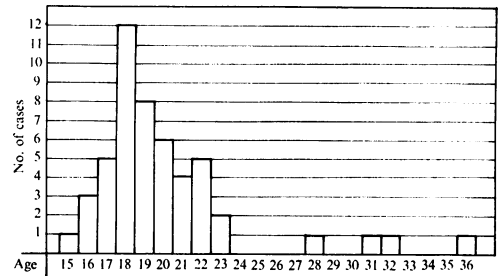
#### **Ages and occupations**

The occupation of the girls was fairly representative of that of the general population of the area. Slightly more than a third were factory workers; about a third were clerks, typists and secretaries; and the remainder included a model, an artist, five housewives and two unemployed. The occupations of the putative fathers varied widely and included one schoolboy and one American airman. Eight were chauffeurs and drivers, one of whom was self-employed, and the majority were manual wage earners. Three were stated to be unemployed, and one of these had recently been in prison. Another who had previously done manual work was now in prison. The ages at which all primiparae (including those who had not had a previous pregnancy of more than 28 weeks duration) in the practice conceived their pregnancies in the year under review is shown

in figure 1. This shows that the unmarried women were responsible for the majority of the pregnancies in the younger age groups. Figure 2 shows the ages at all extramarital conceptions and includes those women who had previously been married. Figure 3

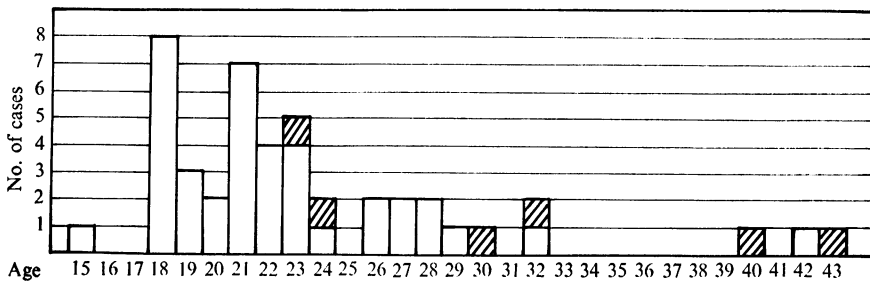


**Figure 1**  
Ages of all mothers at conception of first babies (those shaded are maternities conceived out of wedlock)



**Figure 2**  
Maternal age at extramarital conceptions (first and subsequent pregnancies)

shows the ages of the putative fathers when the maternities were conceived. Those men who were married to other women are contrasted on the chart.



**Figure 3**  
Age of putative father at conception (those shaded are married to another woman)

**Home background**

The girls' fathers were mainly in social groups III-V and none was in social group I, and this analysis was broadly in line with the occupational spread of the patients of the practice. The success of the parents' marriage was classified as happy—unhappy—divorced. Twenty-seven girls believed their parents' marriage was happy and 12 that it was unhappy. In one divorce proceedings were already taking place and in three families the parents were divorced. Three girls answered 'don't know' to this question. As doctor to most of the families concerned, the comment is made that at least one of these answers was incorrect and several others were doubtful. One girl in the series had herself been adopted when a baby. One pair of sisters was included, the elder of whom was herself illegitimate; there were also two sisters-in-law.

**Religious and educational background**

The answers showed that 34 girls were Protestant or Church of England and 11 of this group were either 'believers' or fairly regular church-goers. There were seven Roman Catholics but two of them were non-believers and did not practise their faith. Two of the other five, allegedly practising Roman Catholics, were using some form of

birth control. There was one Baptist; and three girls said they had no allegiance to any religious faith.

The town has a grammar school and four secondary modern schools and most children in the town are educated locally. A few leave the area to go to other grammar schools, to private schools or to Catholic secondary schools. Of the patients in the survey four had attended grammar school and two had remained there until the age of seventeen. The others all went to secondary modern schools and left at 15 or 16 years of age, with one exception who stayed there until she was nearly seventeen. Several did secretarial or other training after they left school. One girl became pregnant whilst still at secondary school but she left at the end of that term.

**Sex education**

The main sources of sexual knowledge are from parents, teachers, friends and books. The interviewer was aware of the discrepancy between what the girls believed they understood and what they actually did understand. They were asked what sexual education they had received at school and at home and if, in both instances, detailed discussion had been available or only limited information. This is expressed in table I. Answers to this question were obtained from 43 of the girls interviewed. Of the four grammar school girls only one had received any sex education at school. More girls had been able to discuss sex with their teachers than with their parents.

TABLE I  
DEGREE OF SEX EDUCATION

<i>Sex education</i>	<i>Home</i>	<i>School</i>
Nil . . . . .	27	20
Some, but restricted . .	11	17
Detailed, with free discussion available . . . .	5	6

They were next asked whether they understood anything about birth control. Two said they knew nothing whatsoever about it; 14 had some information but realized it was inadequate, whilst 25 believed they knew how pregnancy occurred and how it could be prevented. The two girls who admitted they knew nothing about birth control were having regular intercourse with men they intended to marry. Twenty-five women in this series had sexual intercourse on one or more occasions and they claimed they understood how to prevent conception occurring, yet they became pregnant. The methods of birth control used are examined later in the text.

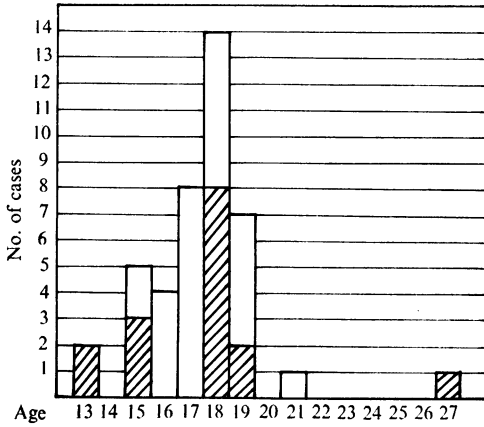
**Previous sexual experience**

The five women who had been married before had all had children, but two of these children had been premarital conceptions. Two single girls had babies by previous boy friends and one of these associations had been 'steady' although the couple eventually parted. Both girls had kept their babies. The ages at which the girls first had sexual intercourse is shown in figure 4. Nineteen of the 42 girls who answered this question had had intercourse with a previous boy friend, and two with more than one. One girl had a fiancé who was not the father of her child and four had had previous steady relationships during which intercourse occurred regularly. One girl had sexual relations with another man, not the putative father, after she had become pregnant.

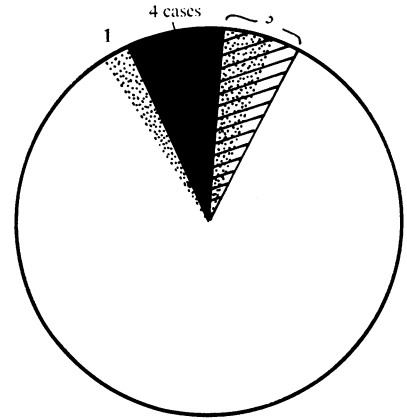
**Marital status of putative fathers**

This was known in 49 of the 50 cases. Seven were married when the girls became pregnant and four of these were still living with their wives at that time, though two concealed this from their girl friends. All four remained with their wives afterwards. Three of the married men had already left their lawful wives and two were cohabiting

when the babies were conceived, whilst the third couple lived together after the pregnancy was confirmed. One couple, both of whom were single, had been living as married for several months (*see figure 5*).



**Figure 4**  
Age of mothers of extramarital conceptions at first sexual intercourse (those shaded represent intercourse with man other than putative father)



**Figure 5**  
Marital status of putative father at time of conception

**Frequency of intercourse with putative father**

The frequency of sexual intercourse varied from once only to regularly over a period of several years. These are analysed in table II. In the 'once only' group, five had been drinking before intercourse took place and one of these, now aged 16, had been pregnant before and had a therapeutic abortion. Of the three who were not influenced by alcohol, one had a steady relationship with her boy friend, but they had different cultural backgrounds and believed that a marriage between them was undesirable. In the 'twice only' group

**TABLE II**  
FREQUENCY OF INTERCOURSE

<i>Once only</i>	<i>Twice</i>	<i>Three times</i>	<i>4-10 times</i>	<i>Regularly, once-twice month, or more</i>
8	3	2	11	21

one girl was immature and uncertain about the paternity of her child but was nevertheless delighted at finding herself pregnant. Of those couples having regular intercourse, many were engaged to be married or had an 'understanding' to marry some day in the future. This influenced their attitude to the risk of pregnancy and is discussed later.

**Method of birth control used**

All the girls who were interviewed were asked what method of birth control, if any,

they had used. As some couples used different methods on different occasions these add up to more than 45 (table IIIa). It appears that a serious attempt to prevent conception occurring had been made by only seven couples, or 18 if 'coitus interruptus always' can be included. The two couples who used a contraceptive sheath on all occasions believed that they used it carefully; in one couple complete penetration had never taken place. Both couples who used the rhythm method were using it incorrectly but the couple who used a post-coital douche had used it regularly for some years. In one case the putative father had been told he was sterile, and thought it unnecessary to use any form of contraception. No one in the whole series had sought professional advice on birth control, though this was available at several centres in London or at Family Planning Association clinics in nearby towns. Although it was not at that time available for single women at the clinic in this town, none of them had requested it.

TABLE III  
(a) METHODS OF CONTRACEPTION USED BY ALL GIRLS IN SAMPLE

<i>Nil sometimes or always</i>	<i>Coitus interruptus always</i>	<i>Coitus interruptus sometimes</i>	<i>Sheath always</i>	<i>Sheath sometimes</i>	<i>Post coital douche</i>	<i>Rhythm method</i>	<i>Incomplete penetration</i>	<i>P.F. believed sterile</i>
19	11	6	2	6	1	2	1	1
(b) METHODS OF CONTRACEPTION USED BY THOSE WHO UNDERSTOOD THE PRINCIPLES OF CONTRACEPTION								
10	9	2	2	3	1	1	1	1

The methods used by the 25 girls who stated that they understood the principles of birth control are shown in table IIIb.

The ten couples who used no method of birth control included three who stated they had been under the influence of alcohol. Only two in the entire series had consistently used a method of birth control that can be considered reliable. It appears that the degree of motivation to prevent pregnancy from occurring was remarkably low.

#### Reason for having sexual intercourse

Without having a long interview in considerable depth, significant answers could not be obtained to this question. However, it was discussed briefly with most of the girls and the answers were put under headings in table IV. The total number of answers exceeds 45 because some girls gave two or more answers.

Of the ten girls who said they wanted a baby, all kept them, and six married the putative father before the child was born. One was living as married, and hoped the fact of her pregnancy would expedite her boy friend's divorce whilst the other three kept their babies although they were unmarried. 'Promise of marriage' figured as a reason 17 times and 12 of these did eventually marry the putative father; the thirteenth awaits his divorce. Two girls in this group did not know that their partners were married and neither of these was prepared to leave his wife, whilst one young man changed his mind only two weeks before the wedding date. Another couple had parted before the pregnancy was suspected. One girl said that she had intercourse in order to keep her boy friend but he deserted her when she told him she was pregnant and she refused to seek an abortion. Another girl explained that she deliberately became pregnant as her parents

TABLE IV

1. Wanted a baby	..	..	..	10
2. Wanted affection	..	..	..	10
3. Wanted sex	..	..	..	27
4. Promise of marriage	..	..	..	17
5. Alcohol	..	..	..	6

did not wish her to marry this boy and the pregnancy would force him to marry her and her parents to permit it. Five of the six girls who were taking alcohol had intercourse on one occasion only.

### **Orgasm**

Answers were received from 42 girls, 18 of whom said they usually reached a climax when they had intercourse and eight said sometimes. Fourteen had never had an orgasm. It occurred sometimes or always in 22 of the 27 girls who answered 'wanted sex' and in all but two of the 20 girls who were having regular intercourse. One girl had a climax when she had intercourse before she was married but never after she was married, whilst in another girl just the reverse had occurred. Conversely, in the 'once' or 'twice' group, only one girl had reached an orgasm and five in this section had been taking alcohol. None of these was engaged to the putative father, only two had a steady relationship with him and none eventually married him; two girls from this group had their babies adopted and two aborted.

### **Marital status of the women**

Five girls in this series had been married previously, two of whom were divorced. Two were awaiting their divorce, one of whom was living with the putative father and with the children of her previous marriage. The fifth married woman remained with her own husband.

When the pregnancy was conceived it appears that 24 girls had some sort of steady relationship with the putative father (26, if two girls whose partners were married are included). Twelve couples were formally engaged and five had fixed a date for the wedding. One couple brought their wedding date forward on account of the pregnancy and one fiancé changed his mind before the wedding and left the area. Two other engaged couples failed to marry before the baby was born, one girl broke off her engagement before she knew she was pregnant and one married when the baby was three-months old. In one case, where there had been a steady relationship though no engagement the boy friend backed out late in the girl's pregnancy as he felt that at 18-years old he was too young for marriage.

By the time the baby was born, 20 girls had married the father of their child and another had married, but not the putative father. The three who were single but were living with married men continued to do so after their babies were born, as did the woman who was waiting for her own divorce. Another girl married when the child was four-months old, and although her husband is not the putative father they are bringing up the baby as a child of the marriage. The marital status of the girls in this series is shown in figure 6 at the time of conception. Figure 7 shows how this has changed by the time of delivery or abortion and figure 8 is six months later.

### **Duration of pregnancies**

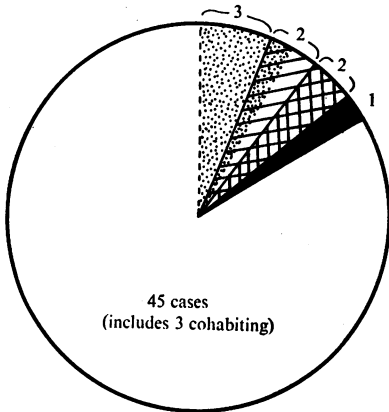
Six of the pregnancies ended in abortion and one of these was done therapeutically on psychiatric grounds. Two girls had septic abortions necessitating admission to hospital and it is probable that no outside person was involved in either of these cases; another girl admitted that she had been to an unqualified person for termination of her pregnancy. One had a spontaneous miscarriage about which she was genuinely disappointed; no details are known of the sixth. No serious attempt appears to have been made by any of the others to have their pregnancies terminated and many stated that they would be too frightened to allow anybody to interfere. The mother of one patient demanded a termination be arranged but the pregnancy was too far advanced for this to be technically possible. It was seldom requested that an abortion should be carried out and in such cases it was usually requested by a patient's mother.

The 44 pregnancies that continued resulted in the birth of 45 babies (one pair of

twins). One ended at 32 weeks with a baby weighing only 3 lbs 1 oz and another at 34 weeks with a baby of 5 lbs 7 oz. The others except the twins, were all over five-and-a-half pounds at birth and were alive and well when six-months old (one mother could not be traced at this stage).

**Maintenance of babies**

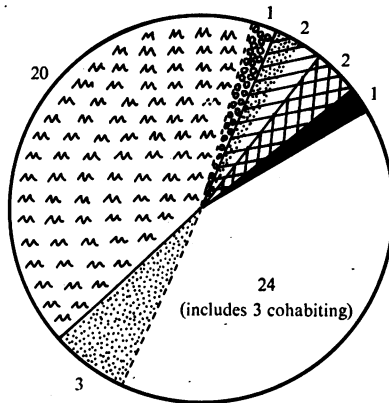
Early in pregnancy ten girls said they would like the baby adopted, two were undecided and the rest, including all who had either been married previously or were living



- Married, living with husband who is not putative father
- Cohabiting with putative father
- Separated from husband
- Divorced
- Unmarried
- Married, not to putative father
- Married to putative father

Figure 6

Marital status of women at conception



- Married, not to putative father
- Married to putative father

Figure 7

Marital status of women at time of delivery or abortion

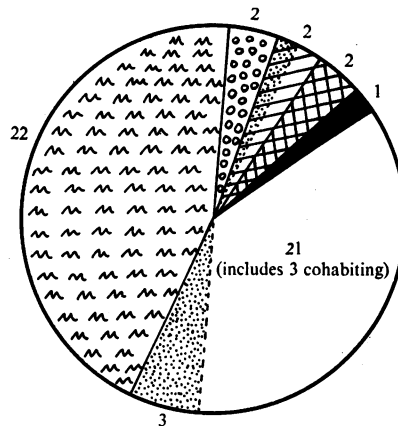


Figure 8

Marital status of women at 6 months after delivery or abortion

with the father, intended to keep the baby. In the end only three, one a temporary resident, chose adoption.

Six weeks after delivery, excluding cases of abortion or adoption, the status of the mothers was: Married—23, previously married—3, living with baby's father—3, un-



married not living with baby's father—14 (including two temporary residents who returned to their parents' homes). There were two more marriages before the final interview six months after delivery and at that time the babies of the 43 local girls were:

With married parents .. .. .	25	With previously married mother ..	3
With unmarried parents .. .. .	3	With unmarried mother .. .. .	10
Adopted .. .. .	2		

Of the ten unmarried mothers one was living with the parents of her fiancé (not the putative father) and nine with their own parents.

The three mothers who had been married previously had other children and depended on social security for maintenance, as did two of the single girls who did not have jobs. Only one unmarried mother had any financial support from the putative father, though two were taking legal action to obtain such support. The others managed by themselves with possible assistance from their own parents and social security. Three of these were able to leave their babies with their own mothers while they worked; the others put their babies with baby minders or in day nurseries. At six months only one single girl was living quite alone with her child, away from her parents, though two of the women who had been married previously were alone with their children. One divorcee had returned to her parental home with her children. One marriage broke down shortly after it took place and the girl returned to her parents after her baby was born and is suing her husband for divorce on grounds of cruelty.

Thus the State was entirely supporting at least seven families and was contributing either directly or indirectly (such as through subsidized day nurseries) to several more.

#### Evaluation of decisions

At the six-month interview, the question "Do you think your decisions have been right?" was asked and only two girls were prepared to answer a definite "No" to this. One of these had left her husband. The other was unhappily married and has since left her husband. One young mother deeply regretted having had the baby adopted, though she nevertheless felt it had been the right decision. Both girls who had had their pregnancies terminated were glad they had done so, though a patient who had a septic abortion and no steady boy friend was disappointed her pregnancy had not continued. After six months, inadequate housing was the main problem; only nine of the families with babies had a home of their own; all the others were living with their parents—more frequently the parents of the girl, but occasionally those of her husband.

Nine patients could not be contacted at the end of six months.

#### Summary and discussion

Pregnancies conceived out of wedlock occur in 50 women in one practice in one year were reviewed and followed up for six months after the birth of the baby. Six pregnancies ended in abortion and one in the birth of twins. The Registrar General's Statistical Review of England and Wales for 1966 shows that 16.3 per cent of all pregnancies were conceived extra-maritally but that 51.7 per cent were legitimated by marriage of the parents before the birth of the child. In this series 30 per cent were conceived out of wedlock. The proportion who married before the child was born corresponds closely with the national figure.

In this community more than half of first babies are conceived out of wedlock. Some of the girls interviewed said they had hoped to become pregnant and most of the couples were having regular intercourse. Only two couples used a reliable method of contraception. Control figures have not been obtained but it appears that extramarital intercourse is the norm in this society but does not necessarily result in a pregnancy. Professional contraceptive advice was not sought by anyone in this series partly because many couples wrongly believed they knew how to prevent conception. It is essential

that young people whilst at school are made aware of the possible consequences of extra-marital intercourse and the problems of bringing unwanted babies into the community. Such education must be given at school as the present generation of parents do not give it.

#### Acknowledgements

Thanks are due to my partners, Drs C. Hodes, J. H. Marks, and G. D. Ripley, for referring their patients to me; to health visitors Mrs Gray and Miss P. Dunn; moral welfare worker Miss M. Lawrence, and the staff of the group practice, particularly Mrs W. Boote and Mrs N. Cox.

#### BIBLIOGRAPHY

- Bowlby, J. (1951). *Maternal care and mental health*. Geneva. W.H.O. Monograph Series No. 2.  
 Kinsey. (1953). *Sexual behaviour in the human female*. Philadelphia, U.S.A. W. B. Saunders Co.  
 Registrar General's Statistical review of England and Wales (1966).  
 Schofield, M. (1965). *The sexual behaviour of young people*. London, New York, Toronto. Longmans.  
 Wimperis, V. (1960). *The unmarried mother and her child*. London. Geo. Allen & Unwin Ltd.  
 Wynn, M. (1964). *Fatherless families*. London. Michael Joseph Ltd.  
 Young, L. (1954). *Out of wedlock*. New York, London. McGraw-Hill.

#### REFERENCES

- Anderson, E. W. (1960). *Psychiatrica et Neurologica*. **139**, 313.  
 Crumidy, P. M., and Jacobziner, H. (1966). *Amer. J. pub. Hlth*. **56**, 1242.  
 Garrad, J. (1967). *Practitioner*. **198**, 268.  
 Greenland, C. (1958). *Med. Offr*. **99**, 265.  
 Greenland, C. (1958). *Med. Offr*. **99**, 28.  
 Hatch, A. S. (1965). *J. Coll. gen. Practit*. **9**, 246.  
 Nachshen, D. (1963). *Practitioner*. **190**, 378.

---

**Paediatric care in general practice: An experiment in collaboration.** G. N. MARSH, M.B., B.S., D.C.H., D.Obst.R.C.O.G., and A. B. TOMPKINS, M.D., M.R.C.P. *Brit. med. J.* 1969. **2**, 106.

A consultant paediatrician transferred one of his hospital outpatient sessions to a group practice centre, attending once every six weeks. Whenever possible the patients' general practitioner also attended the consultation. This arrangement was popular with patients, saved much duplication of medical effort and produced a more efficient clinical service. It also provided academic stimulus to the general practitioners involved and set a pattern which could with advantage be repeated in other specialities.